

ABSTRACT

A coal formation may be treated using an in situ thermal process. A mixture of hydrocarbons, H₂, and/or other formation fluids may be produced from the formation. Heat may be applied to the formation to raise a temperature of a portion of the formation to a pyrolysis temperature. A portion of a formation may be heated from a plurality of heat sources to a temperature sufficient to allow generation of a first synthesis gas having a low H₂ to CO ratio. A second portion of a formation may generate synthesis gas having a H₂ to CO ratio greater than the first synthesis gas. A portion of the first synthesis gas may be blended with a portion of the second synthesis gas to produce a blend synthesis gas having a desired H₂ to CO ratio.